

No.

200000130



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Seminis Vegetable Seeds, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN, GARDEN

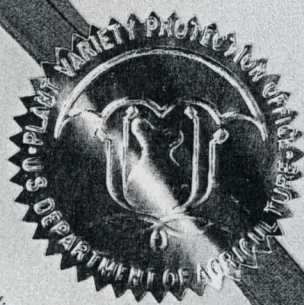
'Fury'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this thirteenth day of December, in the year two thousand two.

Attest:

Acting Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

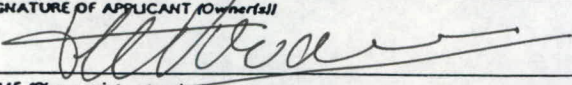
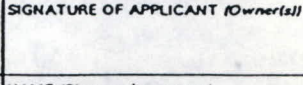
1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER		3. VARIETY NAME	
SEMINIS VEGETABLE SEEDS, INC.		XP 349		Fury	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)		5. TELEPHONE (include area code)		FOR OFFICIAL USE ONLY	
37437 State Highway 16 Woodland, CA 95695 2700 Camino del Sol Oxnard CA 93030-7967		(530) 666-0931		PVPO NUMBER	
		6. FAX (include area code)		DATE	
		(530) 668-0219		1/28/00	
7. GENUS AND SPECIES NAME		8. FAMILY NAME (Botanical)		FILING AND EXAMINATION FEE:	
Phaseolus vulgaris		Leguminosae		FEE \$ 2450 ⁰⁰	
9. CROP KIND NAME (Common name)				DATE 1/24/00	
Garden Bean				CERTIFICATION FEE:	
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name)				DATE 3/20/00	
CORPORATION				DATE 5/22/00	
11. IF INCORPORATED, GIVE STATE OF INCORPORATION		12. DATE OF INCORPORATION			
California		1996 1962			
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS				14. TELEPHONE (include area code)	
Thomas Kramer Seminis Vegetable Seeds Nude 54D 6702 DN Wageningen The Netherlands				31 317 450 218	
				15. FAX (include area code)	
				31 317 450 217	
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)					
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Applicant's Ownership f. <input type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)					
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act)					
<input type="checkbox"/> YES If "yes," answer items 18 and 19 below <input checked="" type="checkbox"/> NO If "no," go to item 20					
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?			19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?		
<input type="checkbox"/> YES <input type="checkbox"/> NO			<input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED		
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?					
<input checked="" type="checkbox"/> YES If "yes," give names of countries and dates <input type="checkbox"/> NO					
US 9-22-99					
21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.					
The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.					
Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.					
SIGNATURE OF APPLICANT (Owner(s))			SIGNATURE OF APPLICANT (Owner(s))		
					
NAME (Please print or type)			NAME (Please print or type)		
T. KRAMER			T. KRAMER		
CAPACITY OR TITLE		DATE	CAPACITY OR TITLE		DATE
Dir. DRP & RA		1/11/00			

EXHIBIT A

The Origin and Breeding History of "Fury" (XP 349)

"Fury" (XP 349) was developed by pedigree selection at Asgrow's Western Breeding Station (WBS) in Twin Falls, from a cross between Hystyle (Parent #1) and True Blue (Parent #2). Hystyle (Parent #1) was developed and marketed by the Harris Moran Seed Company. True Blue (Parent #2) was a variety developed and marketed first by the Ferry Morse Seed Co followed by the Harris Moran Seed Co.

06/10/91: A total of 15 plants were selected from the F2 population "R91 19802" that was planted from 62 grams of F1 Seed (R904001-2365).

05/29/92: A total of twelve F3 plants were selected from line R92 13857 based upon good horticultural qualities and intermediate brown spot scores. The brown spot recorded were recorded on line # 2172 in Sun Prairie, WI. Both experimental units were planted from seed of the fourth selection of line R91 19802.

01/22/93: One greenhouse pot identified as 2321 was planted from two seeds of the from the eighth selection of line R92 13857.

06/09/93: Forty-six seeds from greenhouse pot R93gh2321 was planted under the stake number R93 24462. The individual plants of R93 24462 were bulk harvested because the line was determined to be uniform and stable. Line R93 24462 was selected based on sieve size, an upright plant type, and an ability to set pods under heat.

05/27/94: Bulk seed of R93 24462 was planted under the stake number RWA 597. Crop RWA 597 was determined to be uniform and stable.

06/01/95: Seed of RWA 597 was planted under the stake number RWT 270. Crop number RWT 270 was determined to be uniform and stable.

"Fury" (XP 349) is uniform and stable within commercially acceptable limits. As is true with other garden beans, a small percentage of variants can occur within commercially acceptable limits for almost any characteristic during the course of repeated multiplication. However, no variants were observed during the two years in which "Fury" was observed for uniformity and stability.

(01/03/00)

EXHIBIT B**Novelty Statement Concerning "Fury"**

"Fury" is a processing snap bean (cut style) variety developed by pedigree selection. To our knowledge, the variety that most closely resembles "Fury" is "Hystyle" (marketed and developed by the Harris Moran Seed Co.). The comparative characteristics that most readily distinguish the two varieties include but may not be limited to Seed Coat Color and Curly Top virus resistance. "Fury" has a white seed coat color and is susceptible to the curly top virus, "Hystyle" has a green seed coat color (persistent chlorophyll gene) and is resistant to the curly top virus. No statistical analysis is required for this comparison.

"Fury" is a variety that is resistant to Bacterial Brown Spot (*Pseudomonas syringae*, pv. *syringae*). "Fury" most notably differs from "True Blue", a variety developed and marketed by the Ferry Morse Seed Co., based upon "True Blue" susceptible reaction to Bacterial Brown Spot. No statistical analysis is required for this comparison.

(01/03/00)

4

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3. PLANT: (continued)

2

Pod position 1=Low 2=High 3=Scattered

1

Bush form (illustrated below)



1=Spherical bush form



2=Stem bush form



3=Wide bush form



4=High bush form

5=Other (SPECIFY) _____

4. LEAVES:

1

Surface: 1=Dull 2=Glossy 3=Intermediate

3

Size: 1=Small ('Gitana') 2=Medium 3=Large ('Tendercrop')

3

Color: 1=Light green (as light or lighter than 'Goldrush')
2=Medium green
3=Dark green (as dark or darker than 'Bush Blue Lake 290')

5. ANTHOCYANIN PIGMENT:

1=Absent 2=Present

1

Flowers

1

Stems

1

Pods

1

Seeds

1

Leaves

1

Petioles

1

Peduncles

1

Nodes

6. FLOWER COLOR AND DAYS TO BLOOM:

1

Color of standard

1

Color of wings

1

Color of Keel

4

5

Days to 50% bloom

Flower Color Choices1=White 2=Cream
3=Pink 4=Lilac
5=Purple 6=Blue
7=Other (SPECIFY) _____

7. PODS (edible maturity):

2

Exterior color
(fresh)1=Light green (as light or lighter than 'Provider')
2=Medium green
3=Dark green (as dark or darker than 'Bush Blue Lake 290')
4=Yellow ('Goldrush')
5=Green-red variegated (horticultural)
6=Other (SPECIFY) _____

2

Processed pods (exterior color)

1=Light ('Tendercrop')

2=Dark ('Bush Blue Lake 290')

1

Dry pod color

1=Buckskin ('Sprite')

2=Green, persistent chlorophyll ('Hystyle')

5

7. PODS: (edible maturity): (continued)

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- 4 Cross section pod shape (middle of the pod) 1=Flat 2=Heart (Pear) 3=Round 4=Figure eight
- 1 Creaseback 1=Present 2=Absent
- 2 Pubescence 1=None ('Slenderette') 2=Sparse 3=Considerable ('Provider' or 'Sprite')
- 2 Constriction (Interlocular cavitation) 1=None 2=Slight 3=Deep
- 1 7 mm Spur length
- 1 Fiber 1=None ('Bush Blue Lake 290') 2=Sparse 3=Considerable ('Sprite')
- 6 Number of seeds per pod
- 2 Suture string 1=Present 2=Absent
- 2 Seed development 1=Slow ('Bush Blue Lake 290') 2=Medium 3=Fast ('Provider')
- 1 Machine harvest 1=Adapted 2=Not adapted

Percent sieve size distribution at optimum maturity for non-flat pods

4.76 to 5.76mm	5.76 to 7.34mm	7.34 to 8.34mm	8.34 to 9.53mm	9.53 to 10.72mm	≥ 10.72mm
%	15 %	%	33 %	53 %	%

3 Sieve		cm length		mm width		total mm thickness
4 Sieve		cm length		mm width		total mm thickness
5 Sieve	1 4	cm length	9 9	mm width	1 0 6	total mm thickness
6 Sieve		cm length		mm width		total mm thickness

8. SEED COLOR:

- 3 Seedcoat luster 1=Shiny 2=Dull 3=Semishiny 4=Variable
- 1 Seedcoat 1=Monochrome 2=Polychrome
- 0 1 Primary color 1=White 2=Yellow 3=Buff 4=Tan 5=Brown 6=Pink 7=Red 8=Purple
9=Blue 10=Black 11=Other (SPECIFY)
- Secondary color 1=White 2=Yellow 3=Buff 4=Tan 5=Brown 6=Pink 7=Red 8=Purple
9=Blue 10=Black 11=Other (SPECIFY)
- Seedcoat pattern 1=Solid 2=Splashed 3=Mottled 4=Striped 5=Flecked 6=Dotted
- 1 Hilar ring 1=Absent 2=Present
- Hilar Ring Color 1=White 2=Yellow 3=Buff 4=Tan 5=Brown 6=Pink 7=Red 8=Purple
9=Blue 10=Black 11=Other (SPECIFY)

9. SEED SHAPE AND SIZE:

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1

Hilum view



1=Elliptical



2=Oval



3=Round

2

Cross section

1=Elliptical

2=Oval

3=Cordate

4=Round

1

Side view



1=Oval to Oblong



2=Round



3=Reniform

3 0

gm/100 Seed

gm/100 Seed lighter than

gm/100 Seed same as

2

gm/100 Seed heavier than

8

Use Comparison Varieties from Section 2.

Please make all 3 comparisons.

10. DISEASE RESISTANCE: 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant
PLEASE SPECIFY RACE OR STRAIN WHERE APPROPRIATE

1

Anthracnose (*Colletotrichum lindemuthianum*)

Race Alpha



Race Beta



Race Gamma



Race Delta



Race Epsilon



Race Lambda



Race Kappa



specify race _____

1

Bean Rust (*Uromyces appendiculatus*)

Race 38



Race 39



Race 40



Race 44



Race 45



Race 46



Race 49



Race 50



Race 51



Race 52



Race 54



Race 56



Race 59



specify race _____

0

Powdery Mildew (*Erysiphe polygoni*) _____

0

Fusarium Root Rot (*Fusarium solani* f. sp. *phaseoli*) _____

0

Pythium Root Rot (*Pythium* spp.) _____

1

Aphanomyces Root Rot (*Aphanomyces euteiches*) _____

0

Rhizoctonia Root Rot (*Rhizoctonia solani*) _____

0

Pythium Blight or Aerial Pythium (*Pythium ultimum*) _____

0

Angular Leaf Spot (*Isariopsis griseola*) _____

0

Bacterial Wilt (*Corynebacterium flaccumfaciens* subsp. *flaccumfaciens*) _____

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10. DISEASE RESISTANCE: (continued)

☐ 2 Bacterial Brown Spot (*Pseudomonas syringae* pv. *syringae*)
☐ 0 Common Bacterial Blight (*Xanthomonas campestris* pv. *phaseoli*)
☐ 1 Halo blight (*Pseudomonas syringae* pv. *phaseolicola*)
☒ Race 1 ☐ Race 2 ☐ Other (SPECIFY) _____
☐ 0 Clover Yellow Vein Virus (CYVV)
☐ 2 Bean Common Mosaic Virus (BCMV)
☐ BV1 ☐ NY15 ☐ NL2 ☒ NL3
☐ NL4 ☐ NL8 ☐ Florida ☐ Idaho
☐ Mexican ☐ Western ☐ Type
☐ Other (SPECIFY) _____
☐ 0 Yellow Bean Mosaic Virus (BYMV)
☐ 1 Curly Top Virus (BCTV) Hystyle is resistant
☐ Other (Specify Disease and Race or Strain) _____

11. INSECT RESISTANCE: 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant

☐ 0 Aphid ☐ 0 Root Knot Nematode
☐ 0 Leafhopper ☐ 0 Seed Corn Maggot
☐ 0 Lygus ☐ 0 Thrips
☐ 0 Pod Borer ☐ 0 Weevils
☐ Other (SPECIFY) _____

12. PHYSIOLOGICAL RESISTANCE: 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant

☐ 0 Heat ☐ 0 Cold ☐ 0 Drought
☐ 0 Air Pollution ☐ 0 Ozone
☐ Other (SPECIFY) _____

13. COMMENTS:

Blanched color of "Fury" is darker green than the
 blanched color of "Hystyle".

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICEEXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) SEMINIS VEGETABLE SEEDS, INC.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER XP 349	3. VARIETY NAME Fury
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 37437 State Highway 16 Woodland, CA 95695	5. TELEPHONE (include area code) (530)666-0931	6. FAX (include area code) (530)668-0219
7. PVPO NUMBER 200000130		

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.

☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?

If no, give name of country _____

☒ YES ☐ NO10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer the following:

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?

☐ YES ☐ NO If no, give name of country _____

b. If original rights to variety were owned by a company, is the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country _____

11. Additional explanation on ownership (If needed, use reverse for extra space):

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA Office of Communications at (202) 720-5881 (voice) or (202) 720-7808 (TDD).

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.